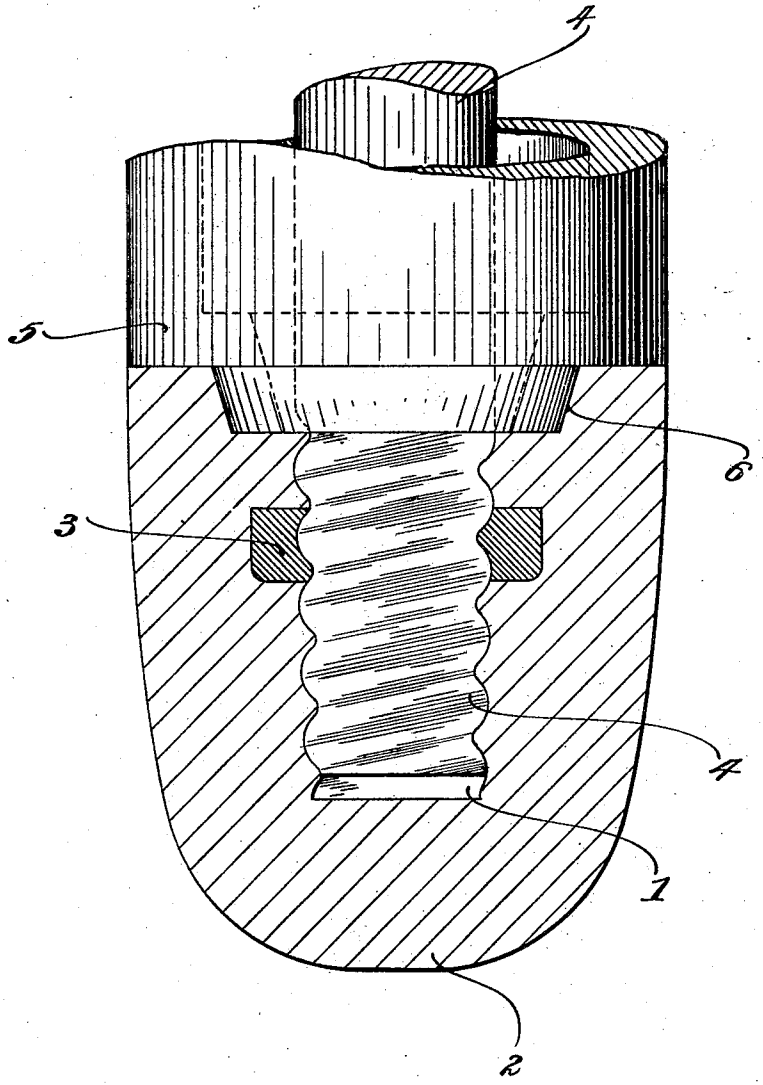
No. 852,644. PATENTED MAY 7, 1907.

C. C. BACON.

STOPPER.

APPLICATION FILED FEB. 14, 1906.



Witnesses:

Frank C. Ranck.

Inventor.

Charles C. Bacon.

By Augustus B. Stoughton

Atty.

THE HORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES C. BACON, OF PHILADELPHIA, PENNSYLVANIA.

STOPPER.

No. 852,644. Specification of Letters Patent. Patented May 7, 1907.

Application filed February 14, 1906. Serial No. 301,055.

To all whom it may concern:

Be it known that I, CHARLES C. BACON, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Stoppers, of which the following is a specification.

The principal object of the present invention is to provide for the stopper and rod improved connection which obviates such troubles as arise, in founding steel and other metals, from the stripping of the threads on the refractory stopper body and at the same time permits of the use upon the rod of a kind of thread which is easily made and repaired and which is not likely to become burred by the rough usage to which it is exposed in commercial use.

To this and other ends hereinafter set forth the invention, stated in general terms, comprises the improvements to be presently described and finally claimed.

The nature, characteristic features and scope of my invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof and in which is illustrated, principally in central section, a stopper embodying features of the invention.

In the drawings 1, is a cavity formed in the refractory stopper 2, and having its walls provided with a thread of comparatively coarse pitch.

3, is a nut embedded in the stopper 2, and having a thread corresponding in pitch with and constituting a continuation of the thread of the cavity 1. The cavity 1, does not extend clear through the stopper but terminates blindly within the same.

4, is the rod and at its end it is provided with a thread which corresponds in pitch with and detachably engages the continuous thread of which one part is formed on the nut 3, and the other on the curved wall of the cavity 1. The fact that the thread is formed both in the nut and in the refractory material of the stopper permits of the use of a thread of coarse pitch which is advantageous because it is very easy to form a similar thread on the rod 4, for example, by drop-forging and such a thread on the rod is not likely to become burred or otherwise rendered inoperative. The fact that the thread of coarse pitch is formed both on the refractory material and on the nut is additionally important because it insures proper mechanical strength, that is to say, the nut serves to prevent stripping of the thread on the refractory material while the latter co-operates with the thread on the nut in affording ample and appropriate connection between the stopper and rod.

5, is a sleeve of refractory material which is usually employed for protecting the rod 4, and at its lower end it takes into an enlargement 6, of the cavity 1.

Having thus described the nature and objects of my invention, what I claim as new and desire to secure by Letters Patent is:

1. A stopper of refractory material having a threaded nut embedded therein and having a cavity provided with a thread of refractory material which constitutes a continuation of the thread of the nut, substantially as described.

2. A stopper of refractory material having a threaded nut embedded therein and having a cavity provided with a thread of refractory material which constitutes a continuation of the thread of the nut in combination with a rod provided with a threaded end adapted to engage both the thread of the nut and the thread of the cavity, substantially as described.

In testimony whereof I have hereunto signed my name in the presence of two witnesses.

CHARLES C. BACON.

Witnesses:

FRANK E. FRENCH,

AUGUSTUS B. STOUGHTON.